UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/817,675	03/27/2001	Shunpei Yamazaki	12732-024001	9812

26171 7590 09/13/2002

FISH & RICHARDSON P.C.
1425 K STREET, N.W.
11TH FLOOR
WASHINGTON, DC 20005-3500

EXAMINER	
O NEILL, GARY W	
ART UNIT	PAPER NUMBER
2873	

DATE MAILED: 09/13/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/817,675	YAMAZAKI ET AL.	
	Examiner	Art Unit	
	Gary O'Neill	2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *PreAmdt A, dated 3/27/01* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 March 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *2,5,6* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☒ Other: *Detailed action* .

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statements

2. Receipt is acknowledged of Information Disclosure Statements submitted 3/27/01, 4/4/02, and 5/24/02 which have been considered by the examiner.

Preliminary Amendment Acknowledgement

3. Receipt is acknowledged of Preliminary Amendment submitted 3/27/01, which has been considered by the examiner.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in-
> (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
> (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

5. Claims 1-8 and 13-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Jones et al. (6198220).

6. Jones et al. discloses as in claim 1, a self-light emitting device (fig.1) having an EL element (10), comprising: a film that is made of an inorganic material (150) covering said EL element, and a film that is made of an organic material (col.4, lines 60-67 & col.5, lines 1-8) covering said film made of an inorganic material.

Jones et al. discloses as in claim 2, a self-light emitting device (fig.1) having an EL element (10), comprising: a film that is made of an inorganic material (150) in contact with (fig.1 & col.5, lines 9-21, entire surface) said EL element, and a film that is made of an organic material (col.4, lines 60-67 & col.5, lines 1-8) in contact with (fig.1 & col.5, lines 9-21, entire surface) said film made of an inorganic material.

Jones et al. discloses as in claim 3, a self-light emitting device (fig.1) having an EL element (10), comprising: a film that is made of an organic material (col.4, lines 60-67 & col.5, lines 1-8) covering said EL element, and a film that is made of an inorganic material (150) covering said film made of an organic material.

Jones et al. discloses as in claim 4, a self-light emitting device (fig.1) having an EL element (10), comprising: a film that is made of an organic material (col.4, lines 60-67 & col.5, lines 1-8) in contact with (fig.1 & col.5, lines 9-21, entire surface) said EL element, and a film that is made of an inorganic material (150) in contact with (fig.1 & col.5, lines 9-21, entire surface) said film made of an organic material.

Jones et al. discloses as in claim 5, a self-light emitting device (fig.1) wherein said film made of an inorganic material comprises silicon nitride (col.6, lines 35-40).

Jones et al. discloses as in claim 6, a self-light emitting device (fig.1) wherein said film made of an inorganic material comprises silicon nitride (col.6, lines 35-40).

Jones et al. discloses as in claim 7, a self-light emitting device (fig.1) wherein said film made of an inorganic material comprises silicon nitride (col.6, lines 35-40).

Jones et al. discloses as in claim 8, a self-light emitting device (fig.1) wherein said film made of an inorganic material comprises silicon nitride (col.6, lines 35-40).

Jones et al. discloses as in claim 13, a self-light emitting device (fig.1) wherein the self-light emitting device is incorporated in an electric appliance (col.4, lines 63-67).

Jones et al. discloses as in claim 14, a self-light emitting device (fig.1) wherein the self-light emitting device is incorporated in an electric appliance (col.4, lines 63-67).

Jones et al. discloses as in claim 15, a self-light emitting device (fig.1) wherein the self-light emitting device is incorporated in an electric appliance (col.4, lines 63-67).

Jones et al. discloses as in claim 16, a self-light emitting device (fig.1) wherein the self-light emitting device is incorporated in an electric appliance (col.4, lines 63-67).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al. (6198220) as applied to claims 1-4 above, and further in view of Sturm et al. (6198220).

Jones discloses the claimed invention as cited above except for an organic film made of polyamide, as cited in claims 9-12. Within the same field of endeavor (organic LED devices), Sturm et al. provides disclosure of an OLED made with a polyamide film (col.6, lines 55-67).

It would have been obvious for one of ordinary skill in the art at the time the invention was made to provide the polyamide film of Sturm et al. as the OLED organic film material of Jones for the purpose of achieving certain desired characteristics for the structure, as in design choice (Jones et al. col.6, lines 19-31).

9. Claims 17-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al. (6198220) in view of Sturm et al. (6198220).

10. Jones et al. discloses as in claim 17, a method of manufacturing a self-light emitting device (fig.1) having an EL element (10) composed of an anode (400), an EL layer (8) and a cathode (900), wherein a film made of an inorganic material (150) covering said EL element is formed using a CVD method (col.5, lines 15-22), and wherein a film made of an organic material (col.4, lines 60-67 & col.5, lines 1-8, design choice) covering said film made of said inorganic material is formed.

Jones does not disclose formation of a film made of an organic material using an ink jet method.

Within the same field of endeavor (organic LED methods) Sturm et al. discloses printing an organic polyamide film by an ink jet method (col.6, lines 57-67).

It would have been obvious for one of ordinary skill in the art at the time the invention was made to provide the use of the ink jet method of Sturm et al. for the formation of a film made of an organic material of Jones for the purpose of providing an appropriate deposition process to achieve the desired film thickness and characteristics (Jones, col.5, lines 1-50).

Jones et al. discloses as in claim 18, a method of manufacturing a self-light emitting device (fig.1) having an EL element (10) composed of an anode (400), an EL layer (8) and a cathode (900), wherein a film made of an organic material (col.4, lines 60-67 & col.5, lines 1-8, design choice) covering said EL element is formed, and wherein a film made of an inorganic material (150) covering said film made of said organic material is formed using a CVD method (col.5, lines 15-22).

Jones et al. does not disclose using an inkjet method to form a film made of an organic material.

Within the same field of endeavor (organic LED methods) Sturm et al. discloses printing an organic polyamide film by an ink jet method (col.6, lines 57-67).

It would have been obvious for one of ordinary skill in the art at the time the invention was made to provide the use of the ink jet method of Sturm et al. for the formation of a film made of an organic material of Jones for the purpose of providing an appropriate deposition process to achieve the desired film thickness and characteristics (Jones, col.5, lines 1-50).

Jones et al. discloses, as in claim 19, a method of manufacturing a self-light emitting device (fig.1), wherein said EL layer (8), said cathode (900), said film made of said organic material (col.4, lines 60-67 & col.5, lines 1-8, design choice), and said film made of said inorganic material (150) are formed using the same film deposition apparatus (col.4, lines 60-67; col.5, lines 17-22; col.5, lines 45-50).

Jones et al. discloses, as in claim 20, a method of manufacturing a self-light emitting device wherein said EL layer, said cathode, said film made of said organic material, and said film made of said inorganic material are formed using the same film deposition apparatus (col.4, lines 60-67; col.5, lines 17-22; col.5, lines 45-50).

Sturm et al. discloses, as in claim 21, a method of manufacturing a self-light emitting device, wherein said EL layer and said film made of said organic material are formed by an ink jet method (col.6, lines 55-67).

Sturm et al. discloses, as in claim 22, a method of manufacturing a self-light emitting device, wherein said EL layer and said film made of said organic material are formed by an inkjet method (col.6, lines 55-67).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following references are being cited for disclosing organic LED devices and methods having various organic and inorganic layered construction: Zyung et al. (6150187); Singh et al. (6228228); and Graff et al.(6413645).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary O'Neill whose telephone number is 703-306-4828. The examiner can normally be reached on Monday - Thursday, 6:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y Epps can be reached on 703-308-4883. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7725 for regular communications and 703-308-7725 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Gary O'Neill
Examiner
Art Unit 2873

GO
September 8, 2002

Georgia Epps
Supervisory Patent Examiner
Technology Center 2800